

=====

Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Durreshwar Anjum

Timestamp: [year=2009; month=2; day=26; hr=11; min=2; sec=3; ms=582;]

=====

Reviewer Comments:

<210> 14

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<220>

<221> misc_feature

<222> 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 14,
16, 18, 19

<223> Bases at these positions are RNA

<400> 14

cggtcccgtc cgcctctcgt t

21

The above <223> response describing RNA bases is incorrect: t's are at location between 1 and 19: t's are not RNA bases.

<210> 15

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<220>

<221> modified_base

<222> 4

<223> n = tetrafluoroindole

<400> 15

ctgntagcct ctggatttga

20

FYI: "n" can only represent a single nucleotide, nothing else. The above explanation of "n" also appears in subsequent sequences.

Application No: 10592919 Version No: 4.0

Input Set:**Output Set:**

Started: 2009-02-09 18:36:35.688
Finished: 2009-02-09 18:36:39.753
Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 65 ms
Total Warnings: 27
Total Errors: 0
No. of SeqIDs Defined: 28
Actual SeqID Count: 28

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 251	Found intentionally skipped sequence in SEQID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)
W 213	Artificial or Unknown found in <213> in SEQ ID (21)

Input Set:

Output Set:

Started: 2009-02-09 18:36:35.688
Finished: 2009-02-09 18:36:39.753
Elapsed: 0 hr(s) 0 min(s) 4 sec(s) 65 ms
Total Warnings: 27
Total Errors: 0
No. of SeqIDs Defined: 28
Actual SeqID Count: 28

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (22) This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> Michael, T. Migawa

Walter F. Lima

Eric E. Swayze

Joshua Nichols

Hongjiang Wu

Thazha P. Prakash

Tadeusz Krzysztof Wyrzykiewicz

Balkrishen Bhat

Stanley T. Crooke

<120> COMPOSITIONS AND METHODS FOR OPTIMIZING
CLEAVAGE OF RNA BY RNASE H

<130> CORE0037USA

<140> 10592919

<141> 2009-02-09

<150> PCT/US2005/008428

<151> 2005-03-15

<150> 60/609,516

<151> 2004-09-13

<150> 60/567,016

<151> 2004-04-29

<150> 60/553,646

<151> 2004-03-15

<160> 28

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<400> 1

ctacgctttc cacgcacagt

20

<210> 2

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide

<400> 2
agtttaggtc tccgatcgtc 20

<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 3
ctgctagcct ctggatttga 20

<210> 4
<211> 2160
<212> DNA
<213> Mus musculus

<400> 4
ggcgccctgc tctcccggcg gggcggcgga gggggcgggc tggccggcgc acggtgatgt 60
ggcgggactc tttgtgcact gcggcaggat acgcgcttgg gcgtcgggac gcggctgcgc 120
tcagctctct cctctcggaa gctgcagcca tgatggaagt ttgagagttg agccgctgtg 180
aggccaggcc cggcgcaggc gagggagatg agagacggcg gcggccacgg cccagagccc 240
ctctcagcgc ctgtgagcag ccgcgggggc agcgcctctg gggagccggc cgggcggcgg 300
cggcggcagc ggcggcgggc ctgcctctct cgtcgtctgt tctaaccggg cagcttctga 360
gcagcttcgg agagagacgg tggagaagc cgtgggctcg agcgggagcc ggcgcaggct 420
cggcggctgc acctcccgt cctggagcgg gggggagaag cggcggcggc ggccgcggct 480
ccggggaggg ggtcggagtc gcctgtcacc attgccaggg ctgggaacgc cggagagttg 540
ctctctcccc ttctctctgc tccaacacgg cggcggcggc ggcggcacgt ccagggaccc 600
gggcccgtgt taagcctccc gtccgcgcgc gccgcacccc ccctggcccg ggctccggag 660
gccgcgggag gaggcagccg ctgcgaggat tatccgtctt ctccccattc cgctgcctcg 720
gctgccaggc ctctggctgc tgaggagaag caggcccagt ctctgcaacc atccagcagc 780
cgccgcagca gccattaccc ggctgcggtc cagggccaaag cggcagcaga gcgaggggca 840
tcagcgaccg ccaagtccag agccatttcc atcctgcaga agaagcctcg ccaccagcag 900
cttctgccat ctctctctc ctttttcttc agccacaggc tcccagacat gacagccatc 960
atcaaagaga tcgttagcag aaacaaaagg agatatcaag aggatggatt cgacttagac 1020
ttgacctata ttatccaaa tattattgct atgggatttc ctgcagaaag acttgaagg 1080
gtatacagga acaatattga tgatgtagta aggttttttg attcaaagca taaaaacat 1140
tacaagatat acaatctatg tgctgagaga cattatgaca ccgccaaatt taactgcaga 1200
gttgcacagt atcctttttga agaccataac ccaccacagc tagaacttat caaaccttc 1260
tgtgaagatc ttgaccaatg gctaagtga gatgacaatc atgttgcagc aattcactgt 1320
aaagctggaa agggacggac tgggtgtaat atttgtgcat atttattgca tcggggcaaa 1380
tttttaaagg cacaagaggc cctagatttt tatggggaag taaggaccag agacaaaaag 1440
ggagtcacaa ttcccagtca gaggcgctat gtatattatt atagctacct gctaaaaaat 1500
cacctggatt acagacccgt ggcactgctg tttcacaaga tgatgtttga aactattcca 1560
atgttcagtg gcggaacttg caatcctcag tttgtggtct gccagctaaa ggtgaagata 1620
tattcctcca attcaggacc cacgcggcgg gaggacaagt tcatgtactt tgagttccct 1680
cagccattgc ctgtgtgtgg tgatatcaaa gtagagttct tccacaaaca gaacaagatg 1740
ctcaaaaagg acaaaatgtt tcacttttgg gtaaatacgt tcttcatacc aggaccagag 1800
gaaacctcag aaaaagtgga aaatggaagt ctttgtgatc aggaaatcga tagcatattgc 1860
agtatagagc gtgcagataa tgacaaggag tatcttgtac tcaccctaac aaaaaacgat 1920
cttgacaaag caaacaaga caaggccaac cgatacttct ctccaaattt taagggtgaaa 1980
ctatacttta caaaaacagt agaggagcca tcaaattccag aggctagcag ttcaacttct 2040
gtgactccag atgttagtga caatgaacct gatcattata gatattctga caccactgac 2100
tctgatccag agaatgaacc ttttgatgaa gatcagcatt cacaattac aaaagtctga 2160

<210> 5
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 5
atgacaatca tggtgcagca attc 24

<210> 6
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 6
cgatgcaata aatatgcaca aatca 25

<210> 7
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 7
ctgtaaagct ggaaagggac ggactggt 28

<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 8
ccttcctga aggttcctcc 20

<210> 9

<400> 9
000

<210> 10
<211> 12
<212> RNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 10
cgcgaaauucg cg 12

<210> 11
<211> 12
<212> RNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 11
gcgcuaaagc gc 12

<210> 12
<211> 19
<212> RNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<400> 12
cgagaggcgg acgggaccg 19

<210> 13
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> misc_feature
<222> 1-19
<223> Bases at these positions are RNA

<400> 13
cgagaggcgg acgggaccgt t 21

<210> 14
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> misc_feature
<222> 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 13, 14,
16, 18, 19
<223> Bases at these positions are RNA

<400> 14

cggtcccgtc cgcctctcgt t 21

<210> 15
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 4
<223> n = tetrafluoroindole

<400> 15
ctgntagcct ctggatttga 20

<210> 16
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 5
<223> n = tetrafluoroindole

<400> 16
ctgcnagcct ctggatttga 20

<210> 17
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 6
<223> n = tetrafluoroindole

<400> 17
ctgctngcct ctggatttga 20

<210> 18
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
 <221> modified_base
 <222> 7
 <223> n = tetrafluoroindole

 <400> 18
 ctgctancct ctggatttga 20

 <210> 19
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <220>
 <221> modified_base
 <222> 8
 <223> n = tetrafluoroindole

 <400> 19
 ctgctagnct ctggatttga 20

 <210> 20
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <220>
 <221> modified_base
 <222> 10
 <223> n = tetrafluoroindole

 <400> 20
 ctgctagecn ctggatttga 20

 <210> 21
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Synthetic oligonucleotide

 <220>
 <221> modified_base
 <222> 5
 <223> n = N-3-methyl-2'MOE-thymidine

 <400> 21
 ctgcnagcct ctggatttga 20

<210> 22
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 17
<223> n = tetrafluoroindole

<400> 22
ctgctagcct ctggatntga 20

<210> 23
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 16
<223> n = tetrafluoroindole

<400> 23
ctgctagcct ctgganttga 20

<210> 24
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 15
<223> n = tetrafluoroindole

<400> 24
ctgctagcct ctggntttga 20

<210> 25
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>

<221> modified_base
<222> 14
<223> n = tetrafluoroindole

<400> 25
ctgctagcct ctgnatttga

20

<210> 26
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 13
<223> n = tetrafluoroindole

<400> 26
ctgctagcct ctngatttga

20

<210> 27
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 5, 15
<223> n = tetrafluoroindole

<400> 27
ctgcnagcct ctggntttga

20

<210> 28
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide

<220>
<221> modified_base
<222> 16
<223> n = N-3-methyl-2'MOE-thymidine

<400> 28
ctgctagcct ctgganttga

20